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EXAMINER

MOORE, IAN N

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/840,837	Applicant(s) RENUCCI ET AL.	
	Examiner Ian N. Moore	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities:

Claim 11 recites “the gateway” in line 4, and it should change to “a gateway”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chea (US006574313B1) in view of Akers (US005883941A).

Regarding Claim 8, Chea discloses a system for providing lifeline telecommunication service (see FIG. 3, VoDSL system with lifeline support) to customer premises equipment (see FIG. 3, Customer premises, IAD 212), comprising:

telecommunication interface (see FIG. 8, DSLAM 8 interface towards regional switching center; see FIG. 4, AIB interface 20) operable to receive telecommunication information (see FIG. 3, voice information from PSTN) from a telecommunication switch (see FIG. 3, Class 5 voice switch, C5 2); see col. 2, lines 56-60; 53-55;

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a data packet service module (see FIG. 4, ADSL termination unit, ATU-C 22a-n) coupled to the telecommunication interface (see FIG. 4, AIB interface 20) and operable to receive the telecommunication information from the telecommunication interface (see FIG. 4, ATU-C receives voice information from PSTN) and to generate data packets for communicating the telecommunication information (see col. 6, lines 34-39; see col. 7, lines 15-17; 49-53; generates data frames/packets for voice data signals),

the data packet service module further operable to communicate the data packets to an analog signal service module (see FIG. 4, Phone Module-CO, PMC 37; from ATU-C 22i to PMC 37 via ATU-R 31; see col. 7, lines 49-53) in a first mode of operation (see col. 7, lines 1-4, 19-25; during a lifeline service mode or bypass mode) and

to communicate the data packets over a local loop circuit (see FIG. 3, (TIP& RING) pair 10; see col. 7, lines 1-4) to customer premises equipment (see col. 7, lines 15-20; from ATU-C 22i to ATU-R 30 of CPE) in a second mode of operation (see col. 6, lines 1-3; see col. 15-20; during normal or conventional mode).

Chea does not explicitly disclose telecommunication information as digital data not encapsulated in data packets in a third mode or operation. However, Akers teaches an interface operable to communicate the telecommunication information as digital data not encapsulated in data packets in a third mode (see FIG. 1, High speed digital card 4, or FIG. 2, an interface for Digital signal; see col. 3, lines 60 to col. 4, lines 10; 46-67; see col. 5, line 10-24; digital signals for bypass mode).

In view of this, having the system of Chea and then given the teaching of Akers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

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modify the system of Chea, by providing the digital signal which are not encapsulated in data packets a third mode of operation, as taught by Akers. The motivation to combine is to obtain the advantages/benefits taught by Akers since Akers states at col. 3, line 1-45; see col. 5, line 20-25 that such modification would provide line powering to remote terminal for high speed digital signals in order to avoid dependence upon local power.

Regarding Claim 9, Chea discloses the data packet service module communicates the data packets (see col. 6, lines 34-39; see col. 7, lines 15-17; 49-53; generates data frames/packets) over the local loop circuit (see FIG. 3, (TIP& RING) pair 10; see col. 7, lines 1-4) to the customer premises equipment using a digital subscriber line access multiplexer (DSLAM) (see FIG. 4, DSLAM 8; note that a DSLAM 8 comprises ATU-C 22, thus, it is clear that ATU-C communicates to CPE using a DSLAM 8; see col. 5, lines 60-64; see col. 2, lines 64 to col. 3, lines 15).

Regarding Claim 10, Chea discloses a management module (see FIG. 3, a combined system of OSS (i.e. element management systems, EMSs) and call processing software/module in the gateway 4; see col. 6, lines 15-20; see col. 7, lines 14-50; see col. 8, lines 12-15) operable to:

determining whether the data packet service module can communicate data packets with the customer premises equipment (see FIG. 6, step 602-610; see col. 8, lines 10-23; the combined system determines the operation mode of ATU-C: normal mode or bypass mode of operation);

select the first mode of operation in response to determining that the data packet service module cannot communicate data packets with the customer premises equipment (see FIG. 4,

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ATU-R 31; see FIG. 6, steps 604-610; see col. 8, lines 11-22; during bypass mode of operation when there is power outage in the customer premises, ATU-C 22 can not directly communicate data packets/cells/frames with ATU-R 30 of the customer premises. Thus, ATU-C 22 communicates to PH-m in the customer premises via ATU-R31 and PMC-37 in bypass mode). Akers also discloses third mode of operation as described above in claim 8.

In view of this, having the system of Chea and then given the teaching of Akers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Chea, by providing a third mode of operation, as taught by Akers for the same motivation as stated above in claim 8.

Regarding Claim 11, Chea discloses wherein the management module determines that the data packet service module cannot communicate data packets with the customer premises equipment if the data packet service module cannot maintain a virtual circuit between the gateway and the customer premises equipment (see FIG. 3, a circuit between gateway 4 and IAD 12i; note that when there is a power failure in IAD 12i, the circuit between gateway 4 and IAD 12i is dropped. Thus, there is no circuit to maintain, and ATU-C 22 (see FIG. 4) cannot communicate data packets/frames to ATU-R 30 (see FIG. 4); see col. 6, lines 5-20).

Regarding Claim 12, Chea discloses wherein the analog signal service module (see FIG. 4, PMC 37) is remotely coupled to the telecommunication interface (see FIG. DSLAM 8 interface) using a digital link (see col. 6, lines 40 to col. 7, lines 4; an xDSL digital link from PMC 37, via SIB 33 and ATU-R 31, to DSLAM 8 interface. Since PMC 37 is not within DSLAM 8, it is remotely coupled to DSLAM 8).

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Regarding Claim 13, Chea discloses the analog signal service module is operable to process the data packets (see col. 6, lines 58-67; see col. 7, lines 54-64; process data frames/packets) to generate an analog telephone signal (see FIG. 4, a phone/analog data signal from PMC 37 to telephone PH-m by bypassing ATU-R 30; see col. 7, lines 1-5; 20-65) for communicating the telecommunication information over the local loop circuit (see FIG. 3, (TIP& RING) pair 10; see col. 7, lines 1-4) to the customer premises equipment (see FIG. 4, Customer premises).

Regarding Claim 14, Chea discloses a method (see FIG. 5 and 6) of providing lifeline telecommunication service to customer premises equipment (see FIG. 3, VoDSL system with lifeline support) using a gateway (see FIG. 4, gateway 4), comprising:

receiving telecommunication information (see FIG. 3, gateway receives voice information from PSTN) from a telecommunication switch (see FIG. 3, via Class 5 voice switch, C5 2); see col. 2, lines 56-60; 53-55,

generating data packets for communicating the telecommunication information (see col. 6, lines 34-39; see col. 7, lines 15-17; 49-53; generates data frames/packets for voice data signals) in a first mode of operation (see col. 7, lines 1-4, 19-25; during a lifeline service mode or bypass mode with plain old telephone service) and in a second mode of operation (see col. 6, lines 1-3; see col. 15-20; during normal or conventional mode);

communicating the data packets to an analog signal service module (see FIG. 4, Phone Module-CO, PMC 37; from ATU-C 22i to PMC 37 via ATU-R 31; see col. 7, lines 49-53) in the first mode of operation (see col. 7, lines 1-4, 19-25; during a lifeline service mode or bypass mode) and; and

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communicating the data packets over a local loop circuit (see FIG. 3, (TIP& RING) pair 10; see col. 7, lines 1-4) to customer premises equipment (see col. 7, lines 15-20; from ATU-C 22i to ATU-R 30 of CPE) in a second mode of operation (see col. 6, lines 1-3; see col. 15-20; during normal or conventional mode).

Chea does not explicitly disclose telecommunication information as digital data not encapsulated in data packets in a third mode or operation. . In particular, Akers teaches an interface operable to communicate the telecommunication information as digital data not encapsulated in data packets in a third mode (see FIG. 1, High speed digital card 4, or FIG. 2, an interface for Digital signal; see col. 3, lines 60 to col. 4, lines 10; 46-67; see col. 5, line 10-24; digital signals for bypass mode).

In view of this, having the system of Chea and then given the teaching of Akers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Chea, by providing the digital signal which are not encapsulated in data packets a third mode of operation, as taught by Akers. The motivation to combine is to obtain the advantages/benefits taught by Akers since Akers states at col. 3, line 1-45; see col. 5, line 20-25 that such modification would provide line powering to remote terminal for high speed digital signals in order to avoid dependence upon local power.

Regarding Claim 15, Chea discloses processing the data packets (see col. 6, lines 58-67; see col. 7, lines 54-64; process data frames/packets) to generate a first analog telephone signal (see FIG. 4, a phone/analog data signal from PMC 37 to telephone PH-m by bypassing ATU-R 30; see col. 7, lines 1-5; 20-65) at the analog signal service module (see FIG. 4, PMC 37); and

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communicating the first analog signal over the local loop circuit (see FIG. 3, (TIP& RING) pair 10; see col. 7, lines 1-4;,, a phone/analog data signal from PMC 37 to telephone PH-m by bypassing ATU-R 30 over the local loop pair 10).

Regarding Claim 16, Chea discloses communicating the first analog telephone signal (see FIG. 4, a phone/analog data signal from PMC 37; see col. 7, lines 1-5; 20-65) from the local loop circuit (see FIG. 4, local pair-I) to a subscriber line (see FIG. 4, telephone line PH-m) in the first mode of operation (see col. 7, lines 1-4, 19-25; during a lifeline service mode or bypass mode of operation); and

processing the data packets (see FIG. 4, ATU-R 30 process frames/packets) from the local loop circuit (see FIG. 4, local pair-I) to generate a second analog telephone signal (see FIG. 4, generating a phone/analog signal from ATU-R 30 to PH-m via PMm; see col. 7, lines 15-20; see col. 6, lines 1-3) for communication to the subscriber line (see FIG. 4, telephone line PH-m) in the second mode of operation (see col. 6, lines 1-3; see col. 15-20; during normal or conventional mode of operation). Akers also discloses third mode of operation as described above in claim 14.

In view of this, having the system of Chea and then given the teaching of Akers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Chea, by providing a third mode of operation, as taught by Akers for the same motivation as stated above in claim 14.

Regarding Claim 17, Chea discloses using a digital subscriber line (see FIG. 4, ATU-C 22 is connected via DSL in VoDSL network to/from customer premises; thus, it is clear that it is using DSL line; see col. 5, lines 55-60; see col. 6, lines 20-30).

Regarding Claim 18, Chea discloses identifying a destination integrated access device (IAD) (see FIG. 4, IAD-i) for the telecommunication information (see FIG. 6, 602,604; the gateway 4 identifies call; see col. 8, lines 10-22; note that in order to establish the circuit, the gateway must identify the IAD by utilizing destination phone number);

determining whether the gateway can communicate with the IAD using the data packets (see FIG. 6, step 602-610; see col. 8, lines 10-23; gateway 4 determines the operation mode (i.e. normal mode or bypass mode of operation) to communicate with IAD-i);

selecting the first mode of operation in response to determining that the gateway cannot communicate with the IAD using the data packets (see FIG. 4, ATU-R 31; see FIG. 6, steps 604-610; see col. 8, lines 11-22; selecting/using a bypass mode of operation when there is a power outage in IAD of customer premises, the gateway 4 communicates data packets/cells/frames to PH-m in IAD-I via ATU-R 31 and PMC-37 in bypass mode), and

selecting the second mode of operation in response to determining that the gateway can communicate with the IAD using the data packets (see col. 2, lines 52 to col. 3, lines 15; selecting/using a normal mode of operation when there is no power outage and, the gateway 4 communicates data packets/cells/frames to ATU-R 30 in IAD-i). Akers also discloses third mode of operation as described above in claim 14.

In view of this, having the system of Chea and then given the teaching of Akers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Chea, by providing a third mode of operation, as taught by Akers for the same motivation as stated above in claim 14.

Regarding Claim 19, Chea discloses determining whether the gateway can maintain a virtual circuit between itself and the IAD (see FIG. 3, a circuit between gateway 4 and IAD 12i; see FIG. 6, step 602, 604, 606; the call processing software in the gateway determine whether there is a call can be established/maintained by the gateway via a circuit between the gateway and IAD 12i, that is, determining whether the call is for normal line/circuit or lifeline support telephone line/circuit; see col. 6, lines 15-26; see col. 5, lines 60-35; see col. 7, lines 45-54; see col. 8, lines 10-22).

Regarding Claim 20, Chea discloses determining that the gateway cannot communicate with the IAD using the data packets if the IAD loses powers, is disconnected from the local loop circuit, or has an internal failure (see col. 7, lines 15-22; see col. 6, lines 4-20; power outage or failure of IAD-I so that gateway 4 cannot established connection with normal operation from since the is no power at IAD).

Response to Arguments

4. Applicant's arguments, see pages 7-9, filed 10-7-2005, with respect to claims 1-7 have been fully considered and are persuasive. The rejections of claims 1-7 have been withdrawn.

5. Applicant's arguments with respect to claims 8-20 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 8 and 14, the applicant argued that, "...combination of Chea and Akers does not disclose, teach or suggest, an interface operatable to communicate/communicating the telecommunication information as digital data not encapsulated

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in data packets in a third mode of operation ...” in page 11, paragraph 2 and page 12, last paragraph.

In response to applicant's argument, the examiner respectfully disagrees with the above argument. Akers teaches an interface operable to communicate the telecommunication information as digital data not encapsulated in data packets in a third mode (see FIG. 1, High speed digital card 4, or FIG. 2, an interface for Digital signal; see col. 3, lines 60 to col. 4, lines 10; 46-67; see col. 5, line 10-24; digital signals for bypass mode).

The applicant argued that, “...the examiner proposed motivation to combine Chea and Akers is improper...a person having ordinary skill in the art would not have to modify Chea...there is no motivation to combine...” in page 11, last paragraph; page 13, paragraph 2.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The motivation to combine is to obtain the advantages/benefits taught by Akers since Akers states at col. 3, line 1-45; see col. 5, line 20-25 that such modification would provide line powering to remote terminal for high speed digital signals in order to avoid dependence upon local power.

In response to applicant's argument that one skill in the art would not be motivated to modify Chea with Akers, the test for obviousness is not whether the features of a secondary

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reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Note that Chea teaches providing an analog/POTS service to a remote terminal during a local power failure. Akers teaches providing both digital data and POTS/analog services to a subscriber. Thus, one skill in the ordinary art would clearly be motivated to modify Chea with Akers as stated above.

In view of the above, **the examiner respectfully disagrees** with applicant's argument and believes that the combination of references as set forth in the 103 rejections is proper.

Allowable Subject Matter

6. Claims 1-7 are allowed.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

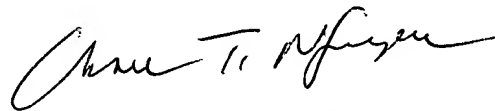
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM

12-28-05



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